



*The Radio Amateur Society
of Australia*

April 2026

QTC Magazine

Maintaining Your Tower or Mast

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- The Geometry of the Bouvet–Australia Path
- DX Happenings
- Dits n Dahs
- RASA at Trains and Hobbies Show
- RASA Club Support
- A.I. in Amateur Radio Follow Up



Amateur Radio and the Titanic



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Publication Information

3	Contact: info@vkradioamateurs.org
	Website: http://vkradioamateurs.org
4	
5	QTC is a publication of The Radio Amateur Society of Australia
8	ABN: 64 687 227 446 (RASA)
9	QTC is published monthly. If you would like to receive your copy you can either
10	visit our web site to download or send us an email and we'll put you on our
15	distribution list.
16	You are welcome to join RASA or simply make a donation to support our work.
20	QTC is Copyright © 2025
21	Cover picture credit:
24	A.I. Generated by RASA team member
29	
31	Contributing Items For QTCMagazine
32	QTC Magazine welcomes contributions for future editions. When planning to
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From the President

Paul VK2APA



Last month I wrote in QTC about the indispensable role of a national Amateur Radio Association. There was a lot in it to digest, however the principles outlined are what guides RASA in what we do.

In mid April this year, the RASA management team will meet face to face to assess what we've achieved so far, and to map out what we want to achieve over the next few years, and how we'll go about it.

There's a name for this process. It's a bit "buzz-wordish", but it is still a valid term. It's called strategic planning.

The Key Elements of a Strategic Plan are:

- Mission and Vision: Why the organisation exists and where it aims to be.
- Core Values: Principles guiding decisions.
- SWOT Analysis: Identifying Strengths, Weaknesses, Opportunities, and Threats.
- Strategic Goals & Objectives: Measurable, actionable, and time-bound goals.
- Action Plans: Specific initiatives assigning responsibility and resources.

Because RASA is a small organisation

with a small team, it is important to employ a strategic planning process in order to deliver our desired outcomes within an appropriate timeframe.

It's amazing what a small team can produce, and RASA is proud of its success with:

- The Foundation Level Study Guide
- The Introduction to Amateur Radio Guidebook
- The Welcome to Amateur Radio brochure, printed and given free to clubs
- Successfully lobbying the ACMA to allow 2x1 contest callsigns
- QRM Guru
- QTCMagazine
- Breaking the silence on 60 metres and high power for Advanced Amateurs

There's a lot more that RASA could achieve with more volunteers on board.

I'm certain that you, the person reading this now, has something to offer by contributing to the things we do, or things we would like to do, if only...

There's plenty of work to share. Website development and maintenance, writing or co writing submissions to the regulator, taking part in our decision making, writing articles for QTC magazine, assisting with proofreading QTC items, desktop publishing, participate in development of new resources.

Is that enough to get you excited? Send an email to info@vkradioamateurs.org and I can have a chat with you about how you can be part of the RASA team.

Meanwhile, if you're planning to go to Antennapalooza, the RASA team will be there - we'd love to catch up and chat.

QTC From the Editor



As I write, many people are keeping an eye on the Artemis 2 mission, having rounded the Moon, and on their way back to Earth. Meanwhile we've been hearing so much about the war in the Middle East. Nobody really wins a war, rather one side emerges with fewer losses than the other; we bury the dead, then we're friends again. Yes, that's a simplistic view of it, but when all is said and done, that's the way of it.

Our great hobby of Amateur Radio, for all intents and purposes, transcends international differences and politics, placing us all into the one arena of Amateur Radio fellowship. We can only hope that we can maintain that special place in humanity.

On more down to Earth matters, the RASA team will be meeting in Victoria during the coming week to review where we are up to, and to make a plan, a vision if you like, for the road ahead. We want to emerge with a new strategic plan for the next several years.

We at RASA have a simple rule of thumb that guides us in what we do - It must be for the good of the hobby. Our history shows that we're not afraid to tackle the hard issues, and we will continue to do so when we believe the hobby will be the better for it.

In this April edition of QTC we've covered some interesting topics. Along with our usual titles of Dits n Dahs, DX Happenings, Club Support and Contesting, and there are stories about:

- Amateur Radio and the Titanic
- Strong Signal, no Decodes: Auroral Flutter and the Bouvet-Australia FT8 Puzzle
- Maintaining Your Tower or Mast
- A Follow-up on last month's Artificial Intelligence Article
- RASA was present at the Train and Hobby Show
- And lots more about services provided by RASA

We hope you will enjoy this edition of QTC, and as always, we welcome your comments and suggestions.

Our email address is
info@vkradioamateurs.org



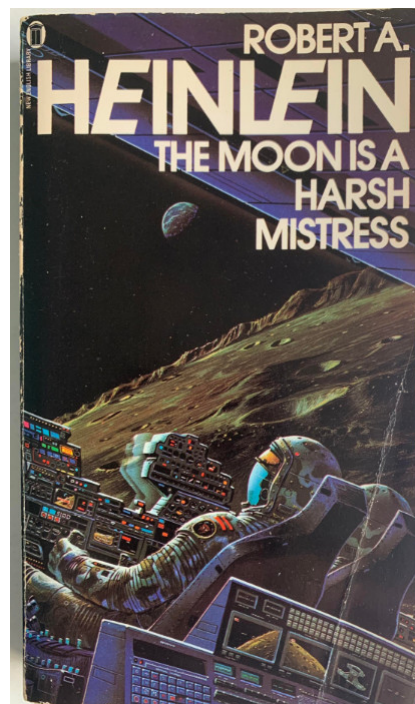
Artificial Intelligence in Amateur Radio

(continued from March QTC)

Sixty years ago the author Robert Heinlein wrote a novel about citizens of the moon struggling for independence from Earth. Set in 2075, the revolutionaries quietly enlisted the help of the regional government computer that had secretly become self-aware when sufficient memory and learning power were added. It was an innovative story.

The computer generated deep-fake video images of a non-existent rebel leader that the authorities could not find to arrest. The computer managed all of the resistance cells, so no one person knew too much if they were caught. It ran a campaign of fake news, imitating the identity of the corrupt regional governor and seized control of communications networks.

The book is called '*The Moon is a Harsh Mistress*'. It went on to win a Hugo award. The story was written at a time when the best computers were the size of car parks, with a working RAM measured in kilobytes. Personal computers did not yet exist.



The story is also topical in 2026 because AI usage has become commonplace and new missions of lunar exploration are currently underway.

Last month in QTC we published an article about AI and how it may affect Amateur Radio into the not-so-distant future. Will Amateurs use AIs to fake their own on-air identities and log contacts? Will Clubs establish friendly AIs to monitor their repeaters and respond to member queries about upcoming meetings and events? Read the full article [HERE](#).

The survey is ongoing, but we have received some responses to share with readers this month:

The first situation was:

An operator sets up an AI with audio coupling to their transceiver. The operator gives the AI system control over the antenna rotator and PTT switching. The operator then goes to work or goes away for a weekend. In the mean time the AI is putting out CQ calls in their voice, with their callsign, gathering contact details, names and signal strength reports, replying with reports and chatty anecdotes of its own. Distant stations are NOT aware that the operator is not really present.

Philip, ZL1PSH responded with the suggestion that Amateurs could develop a separate category for AI contesting and Awards.

Peter VK3WOW wrote that such transmissions would fill our spectrum with junk. He called the concept 'a SPAM generation factory'.

The fourth situation was:

Your local radio club has had its own Club callsign for many years. The club sets up an AI up at the Club Shack on 2 Metres using the Club Callsign and a generic voice.

At any time, members can call it, chat with it and get signal strength reports. The system learns names and callsigns and can respond in a friendly way when it recognises a station and may sometimes simply join in with the contact for a few minutes.

This scenario generated some interesting responses:

Peter VK3WOW commented that perhaps this could be a reasonable facility and that he would have found it useful on a repeater.

Philip responded with provisional approval, only if:

- (a) it didn't breach Club Callsign usage rules;
- (b) It identified itself as an AI; and
- (c) It was only active for a small fraction of each day



The curious aspect about this concept is that not only can we ask Amateurs what they think, but we can also ask an AI what *it* thinks of these possibilities. To be clear, RASA currently has no preferred position on this technology, we are highlighting possibilities and asking questions.

We submitted the following:

Hi Chat GPT. What do you think of the concept of Amateur Radio clubs setting up an AI to operate a VHF or UHF repeater so that it can answer questions by other operators on Amateur Radio topics and upcoming club activities?

The answer, complete and un-edited was surprisingly comprehensive.

(As you read the text, do you hear the voice of the *HAL9000* speaking in your head? Ask it to QSY and it may say *"I'm sorry, I'm afraid I can't do that".*)

Chat GPT Answered:

It's a workable idea—and people are already experimenting with versions of it—but there are a few practical and regulatory realities that matter more than the concept itself.

From a **technical standpoint**, it's very doable. You'd essentially be tying a repeater (or a linked node like an AllStar/EchoLink system) to an AI backend that:

- Converts speech ↔ text
- Queries a knowledge base (club info, ham radio topics, etc.)
- Generates a spoken response

Clubs already run things like **voice ID systems**, **weather reports**, **autopatches**, and **announcement bots**, so an AI "information operator" is just a more advanced version of that.

Where it gets more nuanced is **rules and etiquette**:

- In many countries (including the U.S. under FCC Part 97), **fully unattended operation is restricted**, especially for repeaters. A repeater *can* be automatically controlled, but it still needs a control operator responsible for what it transmits.
- The AI can't just behave like an anonymous user—it must be tied to a **station callsign** and follow identification rules.
- There are limits on **third-party communications** and how messages are handled.
- Most importantly, amateur radio is intended to be **non-commercial and self-training**, so the AI can't drift into prohibited use (ads, business services, etc.).

Then there's the **cultural side**, which might matter just as much:

- Many operators enjoy the **human interaction**, and an AI constantly jumping in could get annoying if not designed carefully.
- Repeater already struggle with congestion in some areas—an AI that talks too much would be unpopular quickly.
- On the flip side, a well-behaved system that only responds when called (like “Info Bot”) could be genuinely useful.

Where this idea really shines is in **specific, limited roles**:

- On-demand: “What's the next club meeting?”
- Automated nets or announcements
- Emergency support: quick reference info (frequencies, procedures)
- Training new hams with basic Q&A

The key to making it successful would be **tight constraints**:

- Only respond when explicitly addressed
- Keep transmissions short
- Clearly identify as an automated station
- Maintain a curated, accurate local knowledge base

So overall: technically solid, legally possible with care, and culturally acceptable *if it's implemented respectfully*. If it's treated as a helpful tool rather than a constant presence, it could actually add value to a club repeater rather than detract from it.

If you end up exploring it further, it's one of those ideas where the **implementation details matter more than the concept**. A simple, well-behaved system will get a much better reception than a flashy one that talks too much.

If you want to take it further, I can help with things like:

- A **basic system design** (radio ↔ PC ↔ AI ↔ audio interface)
- Example **on-air interaction flow** so it feels natural to operators
- Or even **FCC-compliant operating guidelines** for something like this

Just let me know.

Like it or not, it is hard not to be awed by the clarity of this response. Asking the question here was important because it gives us an insight into the quality of dialogue that could be forthcoming from such a facility. Robert Heinlein's futuristic world is not that far away.

AI will be upon us whether we want it or not, but we still have an opportunity to decide what we believe should be appropriate or abhorrent use of Amateur spectrum space. AI usage isn't really covered by existing ACMA regulations. If you have not already read the article in detail, check it out and send in your thoughts on the topic.

The survey is still open. Send your thoughts to info@vkradioamateurs.org and put the words **AI Survey** in the subject line. We would like to know what you think.

Antennapalooza 2026

Antennapalooza is almost here! It's happening on Sat/Sun the 18th and 19th of April.

This is the tenth such event. The theme for 2026 will be about POWER. How we organise power in our shacks, battery & portable power We will have a series of speakers on related topics under the pavilion.

We are also privileged to have a guest presenter from Outlook Industries, a Gippsland manufacturer who will demonstrate radio controlled surveillance carts that have been developed for the Australian army. This equipment uses a unique combination of power strategies to give long operational life in the field.



We hope to see many visitors to the upcoming 2026 event. As in the past, it will take place in Drouin West and the details are on the Antennapalooza website <https://antennapalooza.net.au/>

First presentation starts at 10:15 am on Saturday, 10:30 am on Sunday.

Come for an hour or come for the whole weekend with your caravan and camping gear. Attendance is free. No bookings are required.

Antennapalooza 2026 is possible through the support of RASA, GGREC, SPARC, FAMPARC and the Pride Radio Group



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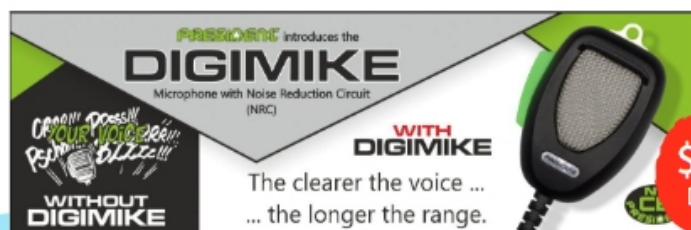
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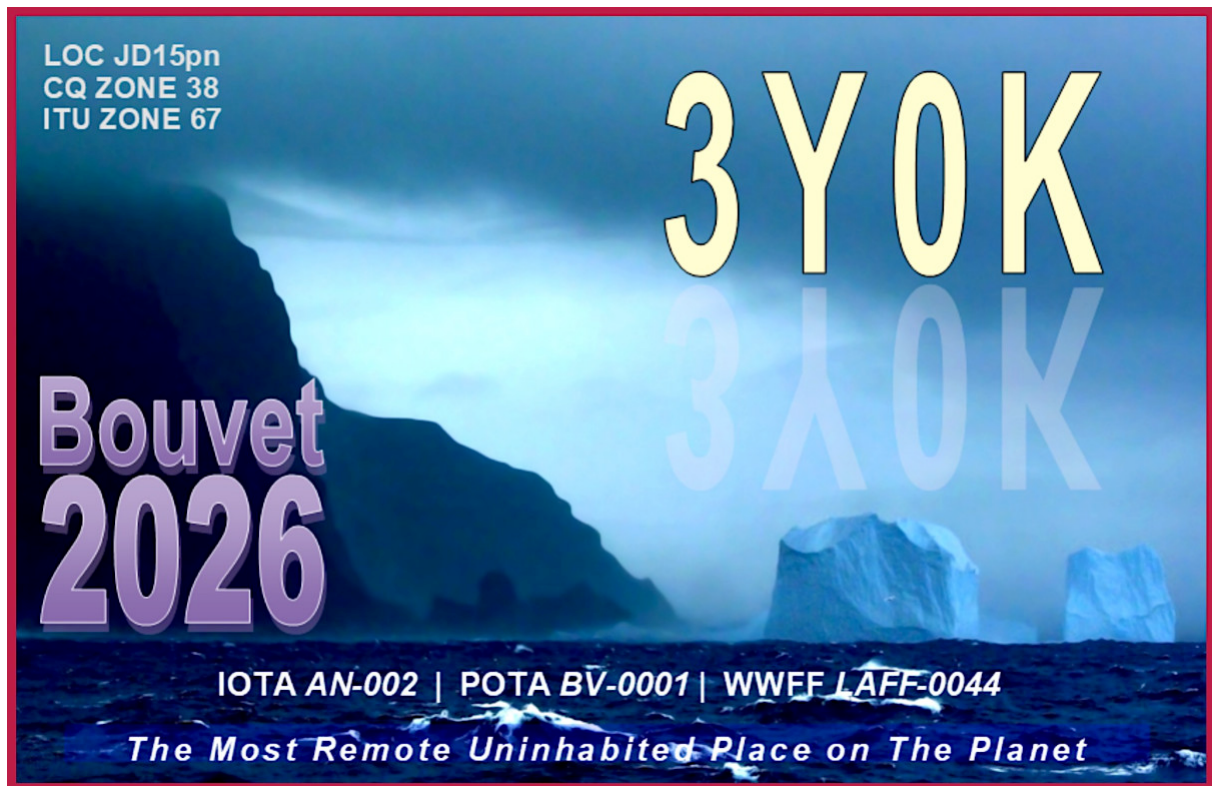
SCAN
ME



STRONG SIGNALS, NO DECODES

Auroral Flutter and the Bouvet–Australia FT8 Puzzle

By Rob Wagner VK3BVW



When the 3Y0K DXpedition to Bouvet Island went on the air, many amateur radio operators across eastern Australia eagerly sought a contact. Bouvet is one of the rarest DX entities on Earth, and any activation naturally sparks strong interest on the HF bands.

Yet something unusual happened. Some Australian operators reported seeing Bouvet signals clearly on their FT8 waterfalls. In some cases, the signals appeared reasonably strong. However, despite this, decodes were rare or nonexistent. That was the case at my QTH. This isn't a beams-and-high-power setup. My modest operation involves 50 W into an 80m long horizontal skyloop or a 30m vertical delta loop. I saw the 3Y0K signal numerous times, but there was only one decode. Talk about frustrating!

This was quite baffling. After all, FT8 is known for its ability to decode signals well below the noise floor. If the signal was visible, why wasn't it decoding? So, I took some time (and a lot of reading) to investigate what might be going on. One possible explanation lies in a phenomenon well known to radio scientists but less familiar to some HF operators: **auroral flutter**.

Bouvet and the Southern High-Latitude Path

Bouvet Island is situated in the remote South Atlantic at approximately 54° south latitude (−54.4333, 3.400, to be exact), placing it firmly within the sub-Antarctic region. From eastern Australia, the great-circle radio path to Bouvet curves deep into

the southern high latitudes before turning northward toward the Australian continent. This geometry matters.

Unlike many DX paths that stay within the relatively stable mid-latitude ionosphere, the Bouvet–Australia route travels near the southern auroral zone. In this region, Earth's upper atmosphere is often disturbed by energetic particles from the solar wind.

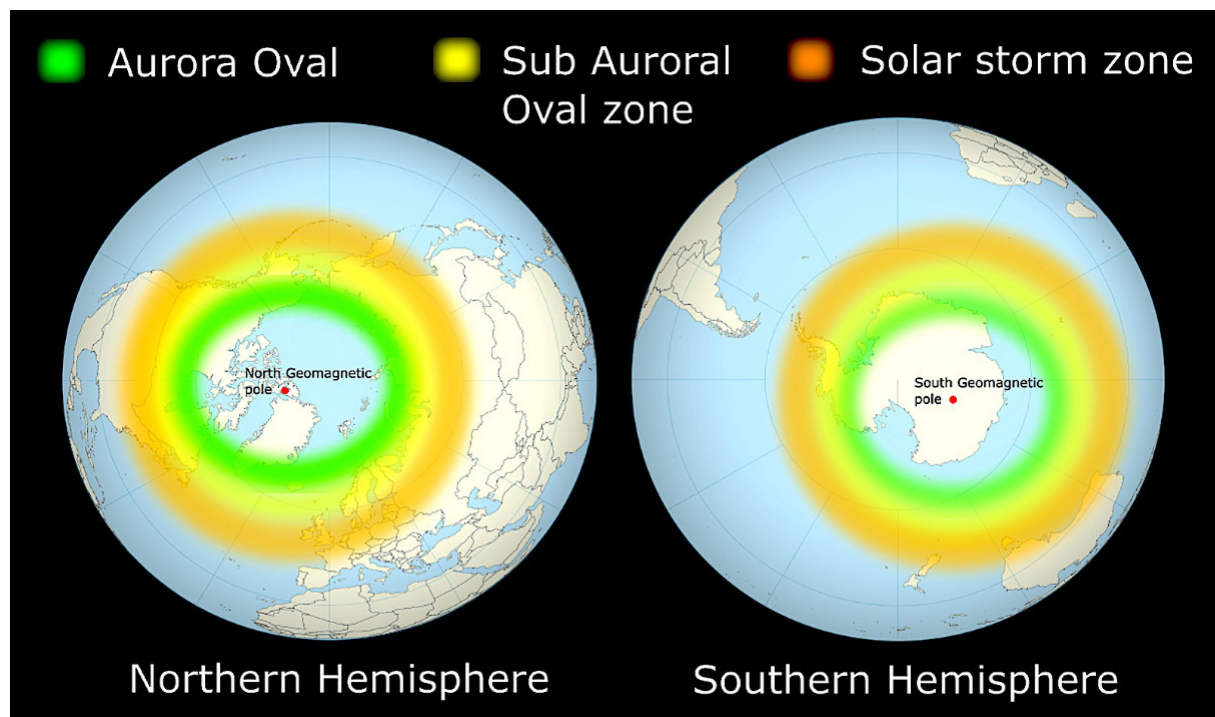
During geomagnetic activity, these particles enter the atmosphere along Earth's magnetic field lines, producing the aurora. At the same time, they create complex structures of enhanced ionisation in the ionosphere. For radio signals travelling through this region, the ionosphere can be anything but smooth.

The Auroral Oval

Auroral activity takes place within a ring-shaped area around the geomagnetic poles called the auroral oval. Under quiet conditions, the oval generally sits near **65–70° geomagnetic latitude**, but during geomagnetic disturbances, it expands towards lower latitudes.

Signals travelling near this region can encounter a highly irregular ionosphere filled with drifting filaments and patches of ionised plasma. These structures are aligned with Earth's magnetic field and can move through the ionosphere at hundreds of metres per second.

From a radio propagation perspective, this environment behaves quite differently from the stable F-layer reflections that support most long-distance HF communication.



Illustrations of where the Auroral Oval zones occur in the northern and southern hemispheres. (Image courtesy of William Copeland)

When the Ionosphere Becomes Turbulent

In mid-latitude propagation, the ionosphere often acts like a relatively smooth mirror, reflecting HF signals back toward Earth. In the auroral zone, that mirror breaks down. Instead of reflecting cleanly from a stable layer, radio waves are **scattered by many small ionised structures**. Each of these acts like a tiny moving reflector, sending part of the signal along slightly different paths.

When those dispersed components arrive at the receiver, they merge in intricate ways. The outcome can include:

- rapid fading
- multiple propagation paths
- unstable phase relationships
- small but significant frequency shifts

These effects collectively are known as auroral flutter. Operators listening to CW signals during auroral conditions often describe the sound as rough, raspy, or "buzzing." The signal strength may stay surprisingly good, but the tone becomes unstable.

The Role of Doppler Spread

One of the key effects of auroral scattering is Doppler spreading. Since the plasma structures causing scattering are moving through the ionosphere, each scattered signal component undergoes a slightly different Doppler shift. Rather than arriving at a single frequency, the signal energy is spread across a small frequency range.

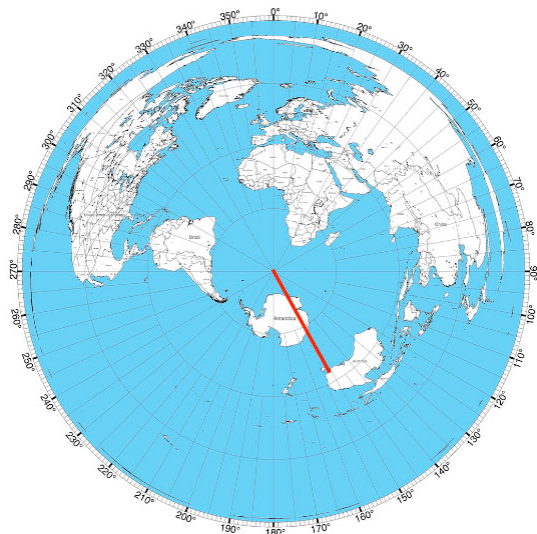
In high-latitude propagation studies, Doppler spreads under auroral conditions have been observed to range from a few hertz to several tens of Hertz, and occasionally much higher during strong disturbances. For many modes of communication, this distortion is inconvenient but manageable. However, for FT8, it can be deadly.

Why FT8 Is Especially Sensitive

FT8 transmits a series of eight audio tones spaced just 6.25 Hz apart. The receiving software integrates the signal over a 12.6-second transmission window and works out which tones appeared at each symbol interval. For this process to function properly, the received tones must stay very stable in both frequency and phase. Auroral flutter disrupts exactly those properties.

If Doppler spreading widens the signal spectrum by tens of Hertz, the narrow FT8 tones blend together. The decoder can no longer identify which tone matches which symbol. The signal might still be clearly visible on the waterfall display, but the information it carries becomes impossible to decode. In other words, the issue isn't signal strength—it is **loss of spectral coherence**.

This great circle map is centred on Bouvet Island. The distance between Bouvet and southeastern Australia isn't that great. To my QTH, it's only 9162 km (5693 mi). But, for me,



it proved to be tough going trying to get a decode from the DXpedition team! The further west we go across Australia, the less influence the auroral zone has - the VK6 guys in Perth were probably in a better location for Bouvet.

The Geometry of the Bouvet–Australia Path

Examining the great-circle path between Bouvet Island and eastern Australia clarifies why auroral effects might have been particularly noticeable on this route. HF signals generally follow the great-circle route—the shortest way between two points on the Earth's surface. When this route is plotted on a globe instead of a flat map, it becomes clear that the Bouvet–Australia path dips deep into the southern high latitudes.

As mentioned previously, Bouvet itself lies near 54° south latitude, already well into the sub-Antarctic. From there, the great-circle route toward eastern Australia initially runs southeast across the Southern Ocean before turning northward toward the Australian continent.

For many stations along Australia's east coast, the route reaches around 60–65° south latitude before heading north again. This is particularly true for amateurs in southern Victoria and Tasmania. Those latitudes lie close to the edge of the southern auroral zone.

Another key detail is that auroral activity is organised by geomagnetic latitude rather than geographic latitude. Because the geomagnetic poles are offset from the geographic poles, a radio path passing through geographic latitudes near 60°S might actually traverse geomagnetic latitudes associated with the auroral oval.

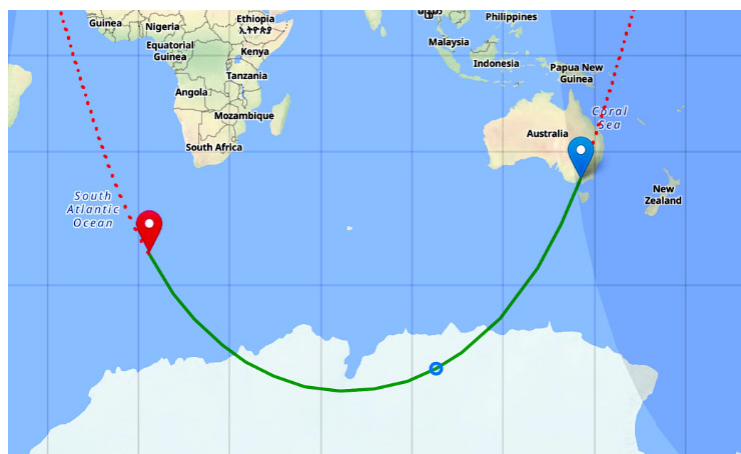
During periods of moderate geomagnetic activity, the auroral zone can expand towards lower latitudes. When this occurs, parts of the Bouvet–Australia route may be within or just beside the disturbed auroral ionosphere. In other words, the signal might spend a significant part of its journey passing through a region where the ionosphere is very turbulent—a situation that can easily cause auroral flutter and Doppler spreading.

A Long Encounter with the Auroral Zone

The severity of auroral flutter partly depends on how long the signal interacts with the disturbed region. If a propagation path briefly crosses the auroral oval, the resulting distortion may be limited. However, if the path runs **along the edge of the oval for thousands of kilometres**, the signal can accumulate significant phase and frequency distortion.

The Bouvet–Australia geometry seems to do exactly that. Instead of crossing the auroral zone quickly, the route might follow the southern high-latitude belt for quite a distance. In propagation terms, this makes it more similar to a sub-polar path than a typical mid-latitude DX route.

Another look at the great circle path, this time on a "flat map".





This version was calculated for my QTH at Mount Evelyn, Victoria, for March 1, 2026, at 0900 UTC.

Strong Signals but No Decodes

This situation offers a plausible explanation for reports from eastern Australian operators. Signals from Bouvet might have travelled through a region of turbulent ionosphere where scattering and Doppler spreading disrupted the narrow spectral stability required for FT8 decoding.

Because auroral scattering redistributes signal energy rather than removing it, the signal can still look visible—sometimes even strong—on a waterfall display. But the spectral precision needed for the digital decoder has been lost.

Not the Only Possible Factor

It is important to note that auroral flutter is not the only phenomenon that can disrupt high-latitude HF propagation. Other effects, such as polar absorption, travelling ionospheric disturbances, or spread-F conditions, can also impair signals.

Without detailed measurements—such as Doppler spectra, ionosonde data, or geomagnetic records—it is hard to pinpoint which mechanism was dominant during the Bouvet operation. Nevertheless, the combination of **high-latitude path geometry, auroral ionospheric turbulence, and FT8's extremely narrow tone spacing** makes auroral flutter a compelling explanation.

A Reminder from the Ionosphere

The Bouvet activation served as a useful reminder that modern digital modes, impressive as they are, still rely on the behaviour of Earth's ionosphere. FT8 can decode signals buried deep in the noise, but it assumes those signals stay spectrally stable. When the ionosphere becomes turbulent—as it often does near the auroral zones—that assumption can break down.

The result is the curious scenario some Australian operators faced: a signal clearly visible on the waterfall, yet stubbornly refusing to decode. Sometimes the difficulty in radio communication isn't hearing the signal at all. Sometimes the challenge is hearing it over the turbulence.

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Check your Tower

Is it about to fall over?

Amateur radio is a long term hobby. One of the first tasks for the new amateur is to put up a mast, or space and funds permitting, put up a tower. However, time marches on and a lot of amateurs have had the same tower installation in their backyard for 20+ years. It has become part of the landscape and we don't look at it often. Certainly, we don't look at it critically. Well...it's time to make that inspection.

Towers can be modest, from bits of water pipe tied to a fence with coat-hanger wire, to repurposed windmill towers, to multi-stage tilt over towers. Maybe they are low maintenance, but they are not zero maintenance.

The big danger is rust. Rust and corrosion. Sometimes it can be obvious and you can walk past a pitted, brown cable and say "yeah, that ain't good." That's when you break out some fresh cable and simply replace everything that looks bad. What's worse is when everything looks normal, fine, intact, but an important aspect is out of sight and only capable of a small fraction of its original strength. Let's examine some of these situations.

Tower Foundations.

Examine tower legs, posts and guy anchor points. It is common for a tower or guy foundation to be a square of concrete in a lawn. The thing is that over 10-20 years, lawns tend to rise a little and what was originally a touch above ground level becomes something of a well, surrounded by grass. Dirt builds up around the foundation and is constantly wet for much of the year. It may not be obvious, but that foundation is being eaten away.

Not long ago a Nally tower was being taken down and under the dirt the five metre long foundation pole was rusted clean through. When it was cut, it revealed that it had been relocated in the past and someone had used a thinner 3mm wall plain steel pipe instead of the galvanised 5mm.

The join had been sleeved with a short section of thick steel pipe and this was the only thing keeping the tower in the air, although it did wobble.



A cross-section is shown here. This was a very dangerous situation.

Some points about this:

- Keep the base of any foundation clean where metal enters concrete
- When preparing a new foundation, raise the entry point at least 50mm above surrounding soils
- Use hot-dip galvanised or stainless steel metals where possible
- Slope surrounding concrete away from metals, so that the surface drains.

Here we can see a tower foundation being cast with an appropriate amount of height above the surrounding yard.



If more space is available, a footing can be expanded to protect cables and metalwork from surrounding grass. Coax cables and lawnmowers are not a good mix. The conduit below has been capped with three 45° elbows that can be pulled apart if new cables need to be added. The rest of the time it can be stuffed with bubble wrap to deter bugs and vermin. If the cables don't come through the concrete then have them depart the tower higher up, perhaps near a pivot point.



Where towers do utilise tilt-over pivot points, inspect the hinge to ensure that the pin is clean and intact.

These pins can rust and expand, then dangerously bind and possibly shear surrounding metal when it is time to tilt the tower. Pins should be thoroughly greased when installed. Hitting them with a spray lubricant at intervals can help. Formulas such as INOX or RP7 leave a good residue and are better than WD40, which is mostly kerosene and evaporates within days.



Winches

Winches and winch cables require special attention. Brake winches are great value because antenna sections will remain safe when hands are taken off the handle. However, they are vulnerable to rust over time. If the cable rises from the winch, then water running down the cable during rain will saturate the cable drum and promote cable rust on the reel. Upgrading the winch cable to stainless steel costs a little more, but is very hard wearing over time. A sound investment.



If cables do rise from a drum, consider re-directing them down with a D-shackle when the tower is idle. This will stop water constantly flowing into the drum and allows the winch itself to be covered with a protective bag or similar. The winch cable here is coloured blue for clarity.

Where a cable passes through a pulley, it can conceal a cable that may have rusted through and the pulley itself may have frozen with corrosion.

Before working a tower, inspect the cable for deterioration and ensure that pulleys spin freely before they are placed under any load.



Wire rope clamps can also deteriorate. It is highly recommended to replace these with stainless steel cable clamps and always use at least two at a time for extra grip.

Simple antenna installations may have a dipole where the ends are attached to a bit of pipe tied to a post with plastic rope. Fencing or clothesline wire is better than rope, as it won't break down under UV light and lose its integrity over time. Also curious cows are less likely to chew through a metallic tie.



Summing up

Our masts, towers and antenna systems are an important part of our hobby and represent a fair investment of time and money. Weather and time takes its toll on this type of infrastructure, but it happens so slowly we often walk past and ignore signs of deterioration.

Do take a few minutes out of a nice day, inspect your installation through critical eyes. Give guy ropes a good shake and test the tension. Replace rusty shackles and turnbuckles.

A bit of early cleaning and lubrication can prevent a lot of damage down the track.

It can be the difference between lasting 10 years or 30 years.

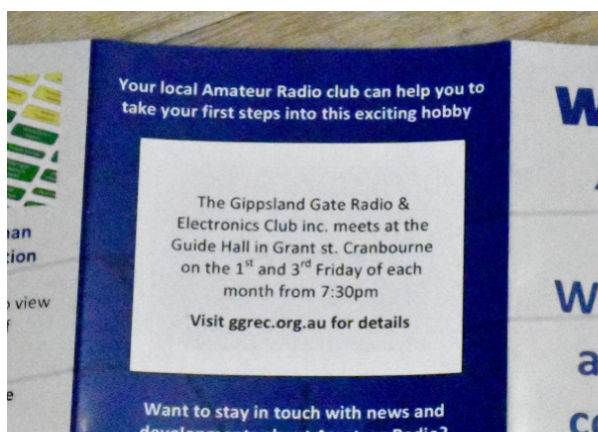
Welcome to Amateur Radio Brochure

In 2025, RASA announced the developed a new “Welcome to Amateur Radio” brochure to promote Amateur Radio. This is a general-purpose flyer for any club or group promoting Amateur Radio, and it is available from RASA **at no cost**.

Whenever a group is promoting the hobby in a public space, they can have some of these folded brochures at hand to provide to curious onlookers.



Even though it is good for Amateurs to have a friendly discussion about what we do, it helps to give the person something to take away with them for later consideration.



Printed and Distributed

The brochures have been printed, and a sample was mailed to Australian Amateur Radio Clubs, inviting them to place an order for brochures.

The initiative was a success, with some 10,000 brochures being sent to Amateur Radio clubs in Australia.

If your club would like to obtain some of these brochures, just send an email request to info@vkradioamateurs.org.

There is no cost to clubs, however donations to help offset the cost are appreciated.

The Radio Amateur Society of Australia (RASA)
vkradioamateurs.org



RASA at 2026 Train & Hobby Show

Train & Hobby Show



A Great Family Day Out

Where would a national hobby show be if Amateur Radio was not properly represented? This year RASA attended the Train & Hobby Show at the Sandown Park Racecourse to Melbourne's South East. We set up a stand and showcased Amateur radio to hundreds of visitors. On the stand was Robert VK3LOL, Wendy VK3WEN, Ian VK3BUF and Dianne VK3JDI.

This was not about plugging RASA, we talked to people about what Amateur Radio is about and gave out brochures for people to take home and contemplate. The two closest clubs to the event venue were the Frankston & Mornington Peninsula Amateur Radio Club (FAMPARC) and the Gippsland Gate Radio & Electronics Club (GGREC). We provided details of where and when visitors could attend their meetings.

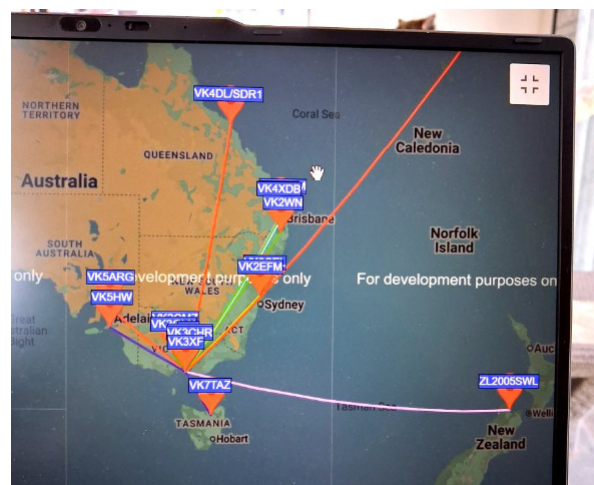


We had some modern transceivers and SDR receivers set up and linked some RTTY signals across the table to a laptop and a 1960's Siemens 100 teleprinter set to 45.45 baud. This was a crowd magnet and lots of kids enjoyed typing their name on paper punch tape and transmitting the result to the PC. Many adults who had worked with the old TELEX systems stopped and reminisced about their experience with old days of the mechanical digital networks.

the noise level from the hundreds of PWM train controllers and early computers and LED lighting gave off S9+ noise levels on most bands.

Wayne VK3XF was present as one of the Event team members. Wayne set up a WSPR receiver and PC at our stand and despite the noise, was able to record a lot of useful HF signals.

A demonstration HF dipole was set up, but





Adjacent to us Peter Parker VK3YE had a stand of his own demonstrating some electrical basics and activities

and scenery setups that were a pleasure to watch in action

These were incredibly detailed, including a superb recreation of the Warragul train station, complete with VLine train, nearby Aldi store and Burson auto parts.





A

whole section of the show was dedicated to legacy computers and early PC games. The TRS80, the Dick Smith System 80, Sinclair, Microbee and even some classic mainframe technology.



This event happens every year, so if you missed out in 2026, look for it in 2027

<https://www.trainandhobbyshow.com.au/main/>

Amateur Radio and the Titanic



Introduction

More than a century after the sinking of RMS *Titanic*, the story continues to resonate—not only as a maritime tragedy, but as a defining moment in the history of wireless communication. For radio amateurs, the events of April 14–15, 1912 represent a turning point that demonstrated both the life-saving potential and the limitations of early radio technology. The *Titanic* disaster helped shape the regulatory, operational, and cultural foundations that eventually influenced the Amateur Radio Service we know today.

The Titanic Movie

While James Cameron's film *Titanic* brought the tragedy to a global audience with remarkable visual realism, its portrayal of wireless operations is necessarily compressed and somewhat romanticised. The film correctly highlights the dedication of the Marconi operators, particularly Jack Phillips, but simplifies the complexity of early radio procedures and the broader communication environment of the time. Little attention is given to issues such as frequency congestion, the lack of standardised protocols, or the commercial pressures that influenced operator priorities—factors that were central to the real-world lessons learned from the disaster.

For amateur radio enthusiasts, the film serves as a powerful introduction to the story, but it should be viewed as a dramatisation rather than a technically accurate account of early wireless practice.

The reality of Wireless at Sea in 1912

At the time of *Titanic*'s maiden voyage, wireless telegraphy was still a relatively new innovation. Ships equipped with wireless sets could communicate with coastal stations and other vessels using Morse code, primarily for commercial traffic such as passenger messages.

The *Titanic* was outfitted with a powerful Marconi wireless system, operated not by the ship's crew but by employees of the Marconi Company. The two operators aboard were Jack Phillips (senior operator) and Harold Bride (junior operator). Their primary responsibility was handling passenger telegrams, not maintaining a continuous safety watch—a crucial detail that would later come under scrutiny. Wireless communication was not yet standardised.

Frequencies, operating procedures, and distress protocols varied widely. While the CQD distress signal was in use, the now-familiar SOS had only recently been introduced and was not universally adopted.



The Night of the Disaster

On the night of April 14, 1912, *Titanic* struck an iceberg in the North Atlantic. Within minutes, Phillips and Bride began transmitting distress calls. Initially, they sent CQD, later alternating with SOS—making *Titanic* one of the first high-profile uses of the SOS signal in an emergency.

Their transmissions were received by several ships, including the *Carpathia*, which ultimately rescued the survivors. However, not all nearby vessels responded in time. One of the most often cited examples is the *Californian*, which was within relatively close range but had its wireless operator off duty for the night. As a result, critical distress messages were missed.

Phillips and Bride worked tirelessly, sending messages until the power failed. Phillips did not survive the disaster; Bride was rescued. Their dedication under extreme conditions remains one of the most powerful examples of the importance of radio communication in emergencies.

In a Garden Shed 3,000 miles away

While the RMS *Titanic* was striking an iceberg in the North Atlantic, a 24-year-old self-taught enthusiast named Arthur "Artie" Moore was sitting in a drafty garden shed in Blackwood, South Wales in the UK. Moore was an "amateur" in the truest sense—a hobbyist who had built his own wireless station using a water wheel for power and a massive antenna slung between pine trees.

On the night of April 15, 1912, Moore's homemade receiver began to click with a frantic rhythm. He didn't just hear the standard CQD (the old Marconi distress call); he heard the newer, more desperate SOS.

Moore immediately raced to the local police station to report that the world's greatest ship was sinking. The officers laughed him out of the building. To them, the idea that a "hobbyist" in Wales could hear a signal from 3,000 miles (4828 km) away was a physical impossibility. It took two days for the official news to reach the town, vindicating Moore and proving that amateur radio was far more than a toy.

Moore went on to a career with Marconi and became the manager of Marconi International Marine Communication Company at Avonmouth, where he remained until his retirement in 1947.

Lessons Learned

The *Titanic* disaster exposed serious shortcomings in wireless operations at sea:

- *Lack of Continuous Monitoring:* Ships were not required to maintain a 24-hour radio watch.
- *Operator Priorities:* Commercial traffic often took precedence over safety communications.
- *Inconsistent Procedures:* Distress signals and frequencies were not standardised.
- *Limited Regulation:* Wireless communication was largely unregulated, with private companies setting their own practices.

These issues directly contributed to delays and confusion during the emergency.

Regulatory Changes

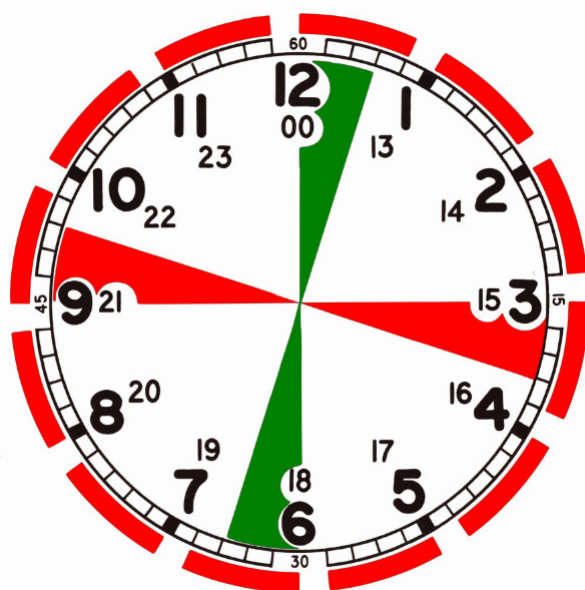
In the aftermath of the disaster, governments moved quickly to reform wireless communication practices. The most significant outcomes included:

- *Mandatory 24-Hour Radio Watch:* Ships were required to maintain continuous monitoring of distress frequencies.
- *Standardisation of SOS:* SOS became the internationally recognised distress signal.
- *Dedicated Distress Frequencies:* Specific frequencies were designated for emergency use.
- *Licensing and Regulation:* Governments began to regulate radio operations more strictly.

In the United States, the Radio Act of 1912 was passed, requiring all radio operators to be licensed and assigning specific frequencies to different services. This legislation also curtailed interference from amateur stations, which had previously operated with relatively few restrictions. The International Telegraph Union (ITU) adopted the changes, which became the International Telecommunications Union (ITU), who today supports radio communications globally.

Morse Code Silence:

The red segments mark 3-minute silence periods for monitoring Morse code distress signals originally on 500 kHz. Now obsolete.



Face of Ships Wireless Room Clock



Later there was the need to add a voice Silence period

Voice Silence:

The green segments mark 3-minute silence periods for monitoring voice distress signals on 2182 kHz.

4-Second Dashes: Sometimes mistaken for a 4-minute period, the red dashes around the periphery were actually for transmitting a 4-second dash with a 1-second break to trigger automatic alarm receivers on other ships.

The above have been replaced by GMDSS (Global Maritime Distress and Safety System) digital systems.]

Impact on Amateur Radio

While the new regulations initially imposed limitations on amateur operators—restricting frequencies and power levels—they also laid the groundwork for the structured Amateur Radio Service we know today.

The *Titanic* disaster demonstrated several principles that remain central to amateur radio:

1. The Importance of Monitoring

Continuous listening is a cornerstone of effective communication. The Maritime Industry established Radio Watchkeeping Standards. In some parts of the world, amateurs maintain listening watches on calling frequencies, repeaters, and emergency nets, ready to respond when needed.

2. Emergency Communication Readiness

Here in Australia the Australian Maritime Safety Authority listens for emergency calls and monitors PLB, EPIRB and ELT Beacons, along with the Australian volunteer coast guard. In the Australian Amateur world there are organisations such as WICEN who offer specialist communications to emergency services and public groups. In other parts of the world, Radio Amateurs are active during emergencies. Whether during natural disasters, search and rescue operations, or community events, amateurs continue the legacy of providing reliable communication when other systems are either unavailable or fail.

3. Standard Operating Practices

After the Titanic Disaster wireless communication adopted the same standards in procedures, morse code, phonetics and Q-codes. Amateur Radio has adopted some of these practices to reduce confusion and improve efficiency, particularly during difficult conditions.

4. Technical Innovation

Early wireless operators were pioneers, working with cutting-edge technology of their time. Amateur radio operators continue this tradition, experimenting with new modes, satellites, digital communications, and emergency technologies.

The Human Element

Beyond the technical and regulatory impacts, the story of *Titanic* highlights the human side of radio communication. Phillips and Bride were not just operators—they were lifelines for over 2,200 people aboard the ship.

Their commitment under pressure exemplifies qualities that are still valued in amateur radio:

- Calmness in emergencies
- Technical competence
- Dedication to service
- Willingness to assist others

These traits are evident today in communication volunteers who step up during bushfires, floods, and other emergencies across Australia and around the world.

Relevance for Australian Amateurs

For Australian amateur operators, the lessons of *Titanic* remain highly relevant. Australia's vast distances and vulnerability to natural disasters make reliable communication essential.

Organisations such as paid and volunteer emergency services and their emergency communication networks continue to play a role in supporting communities when conventional systems are compromised. The principles reinforced by the *Titanic* disaster—preparedness, standardisation, and public service—are embedded in these activities.

Conclusion

The sinking of *Titanic* was a tragedy, but it also marked a pivotal moment in the evolution of radio communication. It demonstrated, perhaps for the first time on a global stage, the life-saving potential of wireless technology—and the consequences when systems and procedures fall short.

For the amateur radio community, the legacy of *Titanic* is both a cautionary tale and a source of inspiration. It reminds us why some of us volunteer our time and services through state and amateur radio organisations and more than a century later, continuing a tradition forged in the icy waters of the North Atlantic in 1912.



Contesting

John Moyle Failed Days

By Bob VK6POP

Who did the John Moyle Memorial Field Day this year? How was it for you? It was a disaster for me. I gave it a go from my new QTH with the tiny backyard. I thought I might be able to do better than the end fed half wave that decorates my backyard and does well for most things that I do, so I put up a G5RV, with the dipole section not quite in a straight line, the apex at about eight metres, and about a quarter of the vertical parallel feedline draped over fruit trees.

The antenna was supported in the air by something my neighbour called “interesting engineering”, involving an extension ladder, a three metre metal pole and an olive tree. The elements of the G5RV barely cleared the top of the tree.



I managed to complete the interesting engineering and the laying out of coaxial cables, slightly organised the shack, got the logging programme set up, went shopping for essential supplies, all by lunchtime Friday. I gave a call on a local HF call frequency for 40 metres, and yes the antenna was working. I was all set. I was SO organised.

Come Saturday, and contest starting time, I was poised ready to strike. Switched on, tuned up, and had a listen on the bands. Nothing. Called on the bands. Nothing. I did this for ages, with no result. I left the shack for a while, sulking, as you do. What horrible fate did my antenna suffer overnight? I checked everything that I could check.

I tried again several times on Saturday, then around teatime, on 40 metres, I made my first contact.

It was VL4R. I know that callsign. It's Di. She used to live in VK6 so she keeps an ear out for VK6 stations. VL4R this is VK6POP. She responded. I meekly handed out 59001, knowing she'd be a bit more than a few up on me, and received 59208. I thought “so that's the way of it, is it?”

Conditions were horrible, severely impeded by an Aurora event. Later on, 80 metres opened. Nevertheless, it was a real struggle, and hard work making each contact. I made just under thirty contacts all up.

I note the following about this contest:

- The multipliers based on callsign prefixes were a good thing
- N1MM is not as intuitive as VKCL, and the learning curve was steep



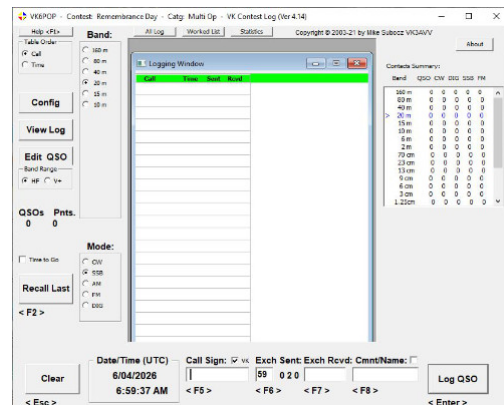
- There seemed to be fewer contestants than previous years, with 133 logs uploaded.
- Many contestants are not there on Sunday mornings.

For the next Aussie contest, which for me will be the Remembrance Day Contest, I've decided to go portable, so I can put up more effective antennas. I have four months to find a suitable location, with tall trees. And no auroras please.

VK Contest Logger (VKCL)

Many people hold the opinion that for Aussie contests, VKCL was a dream to use. Its interface was so intuitive. It's no wonder so many people loved using it. Mike VK3AVV (SK) kept it up to date whenever rules changed, and that was great, however Mike became silent key, and there was no provision made for the ongoing life of VKCL, or for anyone to access the source code in order to carry it on.

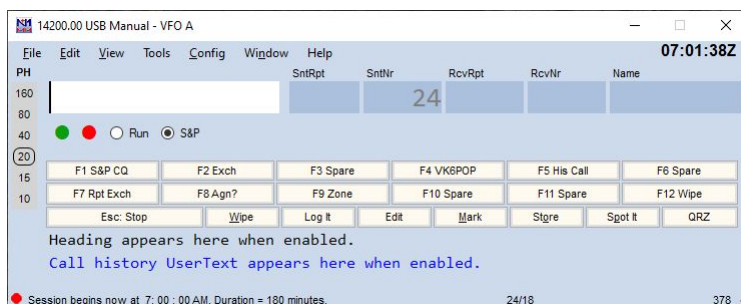
That left VKCL in the position where it could be used forever, as long as the contest rules don't change. With the recent John Moyle contest, this was the case. The rules were changed, and VKCL could no longer do what is needed to score for the contest.



Many people are regretting being unable to use VKCL, however we must face reality. We simply can't freeze our contest rules in perpetuity simply because of a piece of logging software.

What's the answer? The brutal answer is to get over it and adapt to using N1MM, which is, I'm told, a brilliant piece of logging software with a myriad of inbuilt functions to make your contesting station work better. But it doesn't make the coffee.

My first impression of N1MM is that the developers put so much effort into how it works behind the screen, and they forgot the user interface. "Oh that will do" seems to be how it went.



Do we have some clever coders among us? N1MM is, after all, an open source product. Who could build a pretty front end to make it function like VKCL did? Oh, and make the coffee.

Contests Coming Up

I'm only listing the Aussie contests that are coming soon - to find more, visit the contest calendar [HERE](#).

GGREC Hamfest

VK4SN 
MY STATION ▾
CONTESTS ▾
ANTENNAS
TECHNICAL ▾
RADIOS ▾
HISTORY ▾
LINKS ▾
MY WORK

VK4SN Contest Calendar

Times on this calendar are UTC. Latest update = 22/04/2025

1. Google Calendar. 2. Popular contests chart/s. 3. WIA contest breakdown.

Today
< >
Apr – Aug 2026 ▾
Schedule ▾

6	APR, MON		
11	APR, SAT	06:00	JIDX CW (Day 1/2) jidx.org
12	APR, SUN	Until 13:00	JIDX CW (Day 2/2) jidx.org
18	APR, SAT	All day	CQMM CW (Day 1/2) http://www.cqmmidx.com/
19	APR, SUN	Until 13:30	CQMM CW (Day 2/2) http://www.cqmmidx.com/
25	APR, SAT	All day	SP RTTY Contest
2	MAY, SAT	10:00 – 11:00	Harry Angel Memorial Sprint http://www.wia.org.au...
9	MAY, SAT	10:00 – 12:00	VK QRP HRS CONTEST http://vkqrpclub.org

GGREC HAMFEST SALE 2026

On **Saturday, July 4** the Gippsland Gate Radio & Electronics Club will be hosting a Hamfest sale . the venue is at the **Longwarry Community Hall** at 14 Kennedy St. Longwarry, approx 60km East of Dandenong, Vic. The venue is easy to find. It is just 3 km South of the freeway interchange, 150 metres South of the Longwarry train station and level crossing.



Doors open at 10:00 am for buyers. Entry fee is \$10 Doors open at 8:30 for stall holders. Fees are \$20 per table. must be paid for in advance of the event via EFT. 32 tables are available, with a maximum of 4 tables per seller. Table hire includes entry for two persons. **EFT use BSB 633000 Account 146016746** Bookings are not confirmed until a booking number has been issued by the booking coordinator. No trading before 10:00 am please.

Direct enquiries to: hamfest@ggrec.org.au or call 5644 3118



Radio for the Curious & Creative

The Radio Amateur Society of Australia



Club Support

RASA supports Amateur Radio Clubs in various ways. Our supports and resources are provided free, and there is no requirement of membership or affiliation.

RASA's interest is "what is good for Amateur Radio".

Does your club conduct courses and exams for Amateur Radio Qualifications?

- The Foundation Level Study Guide is structured around the syllabus set by the ACMA for the Foundation level qualification. This electronic publication contains live links to instructional videos and other supporting information. The FLSG is available as a PDF download, or to read on screen. The FLSG is FREE to everyone.
- The Introduction to Amateur Radio Guidebook contains a lot of useful information for newcomers to the hobby, and perhaps even those returning to it.
- RASA will publish your club's provided contact information in the Foundation Level Study Guide, and on the RASA website. Your club must provide the information, we will not harvest it.

Is your club planning something in the public space?

- RASA has developed a brochure called "Welcome to Amateur Radio". This brochure contains the sort of information that you're likely to tell a member of the public that you engage in a conversation. Giving the brochure to the person reinforces that information, and give the person a means of following up.
- The brochure has a space on it where you can affix a label containing club contact information, meeting place and times etc.
- These brochures are available free from RASA on request. Although the brochures are free, a donation to cover postage would be appreciated.
- Contact RASA by email to info@vkradioamateurs.org

RASA will talk to your club

- If physically practical, a RASA team member can visit your club to talk about RASA
- If a visit is not practical, and after all Australia is a huge place, we can do a presentation to your club via ZOOM.
- Similarly we can have a presence at Hamfests, again where practicable.



**Radio for the
Curious & Creative**
The Radio Amateur Society of Australia



DX Happenings

Click on the images to proceed to the website.

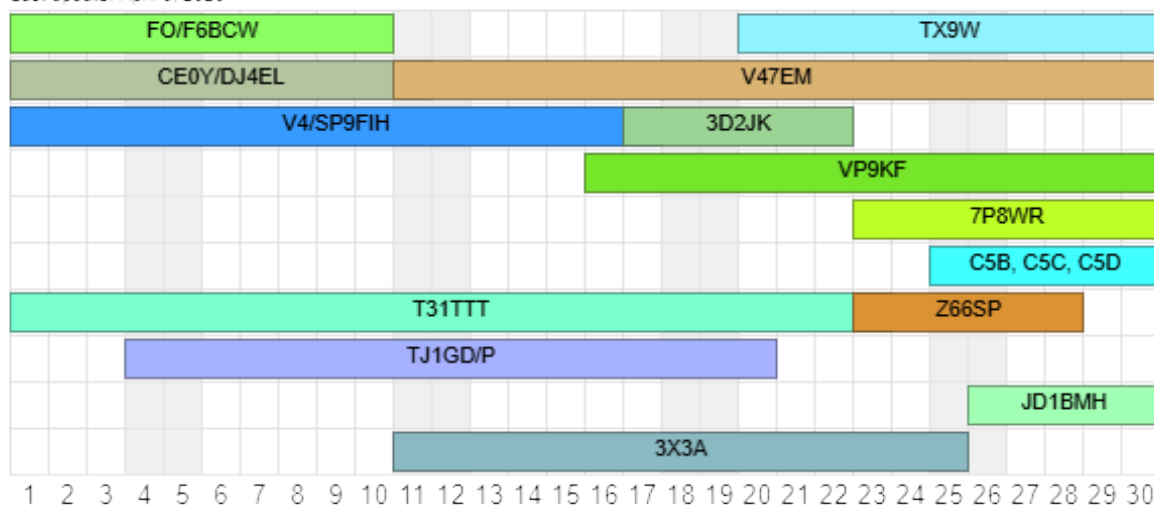
On these pages we provide a sample of what's happening in the DX world. For the full, up to date story, visit the website.



QTC welcomes DX stories provided for publication.

DX WORLD.net FEATURED DXPEDITIONS TIMELINE

Last update: April 3, 2026



Edited by MM0NDX

APRIL

© IK8LOV Max Laconca

Cocos Keeling Islands April-May 2026

Mark VK9BSA and Deena VK9DEE are on Cocos Keeling Island for six weeks from 7th April. They will be on air mostly on weekend (are there for work), but listen out anyway.



Mark and Deena are both on QRZ.

It's important to read their QSL information if you require a QSL card.



Click on these cards to find out more about them.

You'll find more of these in the [DX-NEWS](#) section of DX World





Dits n Dahs

By Chris VK3QB

There is a fair bit to cover this month. Most importantly, if you want to sign up for CW Classes get onto it quickly. You'll need to register before 18th April. See below for details.

If you're looking for some regular activities to help build your skills, on-air confidence, or just to be part of an organised event, check the schedule below.

And... check the Morse code Podcast for this month – if you'd like to hear from Callum M3MCX, don't miss it.

Morse Code Zoom Forum/Podcast

The next Morse Code Podcast is on 20th April at 08:30Z (UTC)

This month I'm interviewing Callum M0MCX, the name behind the very effective and successful vertical antenna, the DX Commander. Callum is well-known for his informative and educational YouTube recordings, as well as his sharp wit and great sense of humour.

We are sure to have a great session, hearing about Callum's involvement in the hobby and why his antennas have become so well known around the world.

Join the Zoom Meeting – Click the link below and include your name and callsign when in the waiting room so Chris can admit you to the session.

Full details [HERE](#)

Strange CW-like signals on 40 metres

Various people have reported strange CW like signals around 7.041 MHz with what appears to be paired signals further up the band. It is possible to pull what sounds like a bit of Morse code out of it from time to time, but the general consensus is that this is not a Morse code transmission.

Someone sent me this [YouTube video](#), and it offers an interesting explanation.

Upcoming Events

Monday - Medium Speed Test (MST)

Great practice at around 20-25WPM

Times: Every Monday: 1300-1400Z and 1900-2000Z
Every Tuesday: 0300-0400Z

Details of Medium Speed Test [HERE](#)

Tuesday night – CQ QRS net – 80, 40 & 20m. CW segments of the bands.
Typically, 12-18WPM [Website](#)

Wednesday Wrap – 80, 40 & 20 metres. 0900UTC – 1100UTC, FDU Frequencies x.028 +/- (included some fast code practice for those interested) More info [HERE](#).

CW Test (CWT)

Great practice but a bit manic speed wise. Mostly 28WPM-40WPM

Times: Every Wednesday: 1300-1400Z and 1900-2000Z

Every Thursday: 0300-0400Z and 0700-0800Z

Website [HERE](#)

NZ Net, which has been operating daily on 7.030 MHz at 0800 UTC, changes to 3.535 MHz at 0900 UTC for the duration of the southern Winter, effective Sunday 5 April. The net welcomes all check-ins, with or without traffic.

RandomGram

18 April at 2200UTC

Click on the image for more information.



CW Academy



Is it time to start thinking about learning or improving your code?

If so, I'll be running Beginners and Fundamental classes in May and June. Classes for Intermediate and Advanced will be available but will be hosted from North America or Europe.

Semester Overview

- **Duration:** Eight-weeks long and held three times per year (Jan-Feb, May-Jun, and Sep-Oct).
- **Schedule:** Twice weekly sessions held on Mondays and Thursdays, starting at 7.30 PM or 8.30 PM.
- **Format:** Virtual training via Zoom or Skype (audio/video). Students and advisors can see, hear, and send Morse to each other in real-time.
- **Grouping:** Advisors and students are generally grouped by time zone.
- **Language:** Most classes are conducted in English.
- **Workload:** Students are given daily assignments prior to each meeting.



We use the Farnsworth Method; you'll be learning at a character speed of 18-20 wpm, but we increase the spacing to slow down the effective speed. This method is proven as being the most effective and provides a pathway to improvement and true CW competence!

1. Beginner

Prerequisite: Limited or no prior experience with Morse Code.

Class Objectives:

- Learn Morse Code characters (letters, numbers, and some punctuation).
- Learn to head copy and send Morse Code.
- Learn on-air protocols of a basic QSO.
- **Goal:** Learn Morse Code to 6 wpm+.

2. Fundamental

Prerequisite: Familiarity with Morse Code characters. Operating at 6 wpm+ and desire to increase proficiency.

Class Objectives:

- Increase head copy and send skills using Instant Character Recognition.
- Increase skills for on-air conversational QSOs.
- Introduction to contesting skills.
- **Goal:** Learn Morse Code to 10 wpm+.

What do students say about CW Academy?

"I can wholeheartedly recommend the CWA courses and their excellent methodology, I doubt I would have every got on the air without it."
Darrin VK3VDP

Now I'm copying callsigns and QSOs at around 22/12, and sending at about 22/15. My sending is definitely stronger than my copying at this stage, but both have improved massively."
Paul VK1OZ

For any ham thinking about learning morse for the first time, or anyone having previously learnt morse and wanting to relearn the code using a proven system, I highly recommend the course."
Chris VK5FR

If you're interested in learning or improving your Morse Code, check out CW Academy in more detail [HERE](#).

Drop me an email if you have questions or are interested in joining a class later in the year.

Chris VK3QB



A different kind of activity: RandomGrams

By Chris VK3QB

Last month Stan ZL3TK finally convinced me to try out the monthly RandomGram event.

<Insert RandomGram image>

RandomGram is a unique Morse code event that prioritises accuracy over speed. Unlike standard contests where operators exchange predictable information like serial numbers, RandomGram requires participants to accurately exchange groups of random characters.

Key Features

- **Accuracy-Focused:** Scores are determined entirely by how accurately random character groups are transmitted and received.
- **Even Playing Field:** Because the character groups are random, operators cannot "guess" or use software to auto-fill information, making it accessible to operators of all skill levels.
- **SWL Participation:** Shortwave Listeners (SWL) can participate by monitoring and logging exchanges they hear between other stations.

How to Participate

1. **Get Your Unique Code Groups List:** Before an event, you must email your call sign to **RG+owner@groups.io** to receive a list of registered random code groups.
2. **Call CQ RG** During the designated event time, call CQ RG or answer others on non-WARC HF bands.
3. **The Exchange:** Send a real signal report (RST) and **one** random code group from your TX List. RSN is the better reporting protocol in these circumstances; with this protocol you provide the other operator with an insight into the challenges you are facing, thus he can tailor his sending to optimise readability.
4. **Logging:** Log the code group you receive from the other station. You can contact the same station multiple times on the same band (no *dupe* restrictions). Just make sure you either call CQ or work another station before logging a *dupe*.
5. **Submit your log:** Email your log listing of only received groups, no callsigns, signal reports or times, to the organiser (RG+owner@groups.io to have your accuracy verified and results published)

To give you an idea of how it works, I ended up logging eight RG QSOs with three different stations (ZL3TK, N1FG & VK2DVA) and received the following 5-letter groups.

A7N67 9RIB6 SJM1D 6O113 UPTNK KJ4VJ GQXKZ GC777

Each group was sent at least twice; in fact, so deep was the QSB with ZL3TK in one QSO, I must have asked for four or five repeats; but I'm confident that I copied the group correctly.

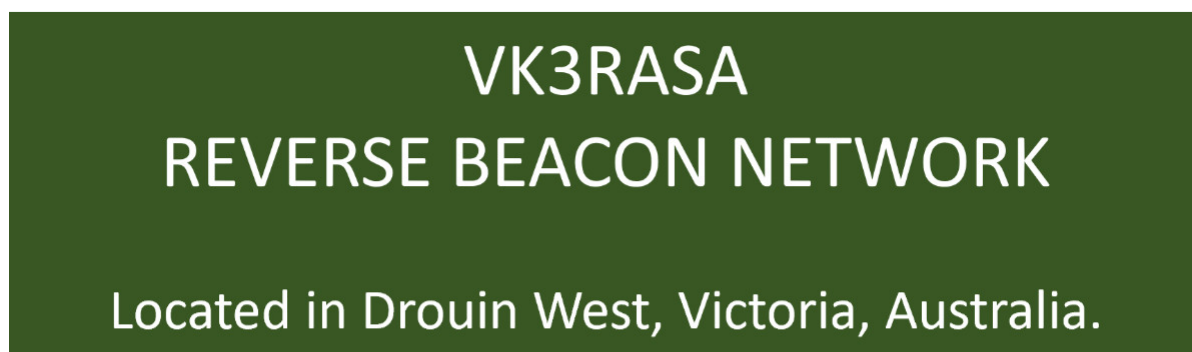


Once confident I had copied the group correctly I sent a “R R QSL QSL TU”; some operators send back what they have copied asking for confirmation. There’s no hard and fast rule, so do whatever works for you to ensure you have the group copied correctly.

Next time I hope to log many more RG QSOs, see more local participation, and work more DX ops. Also, Stan has created the *Oceania* team, so if you do participate, please let the organiser know you’d like to join the team when you register.

So, give it a go; the RG Event usually runs for 24 hours, but you only need to put in as much time as you want. Skeds can be arranged via the SKCC Sked page.

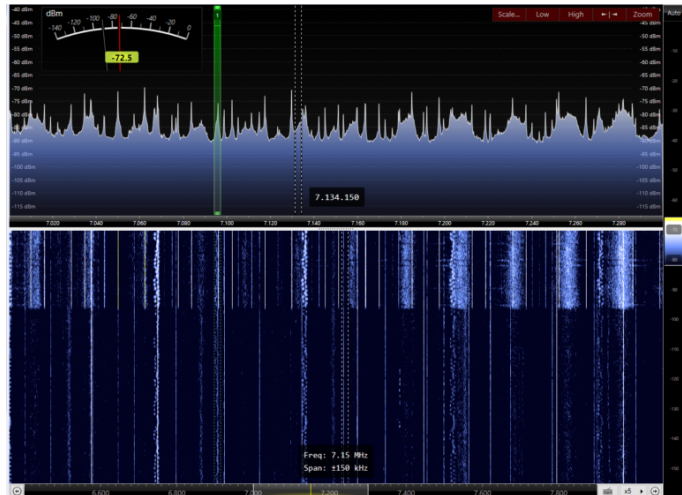
For current event schedules and detailed rules, you can visit the [RandomGram Groups.io page](#) or follow updates from Drew Kowal AF2Z on the [QRZ Forums](#).



***The Radio Amateur Society
of Australia***

QRM GURU

Does HF look like this at your QTH?



Read on....

- * Are you suffering QRM/EMI?
- * Do you need online assistance to resolve your noise issues?
- * What should you expect from the Regulator?

QRM Guru is a RASA online resource to help you resolve your QRM/EMI issues. QRM GURU is a free resource, built by Hams for Hams.

Access [QRM GURU HERE](#)

